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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 09/587,302  | 06/05/2000  | Hoa Thu Tran         | NCRC-0011-US(9172)  | 7601             |
| 26890   | 7590        | 02/25/2004           | EXAMINER            |                  |
| JAMES M. STOVER<br>NCR CORPORATION<br>1700 SOUTH PATTERSON BLVD, WHQ4<br>DAYTON, OH 45479 |             |                      | ANYA, CHARLES E     |                  |
|   |             | ART UNIT             | PAPER NUMBER        | 2126             |
| DATE MAILED: 02/25/2004   |             |                      |                     |                  |

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                 |              |
|------------------------------|-----------------|--------------|
| <b>Office Action Summary</b> | Application No. | Applicant(s) |
|                              | 09/587,302      | TRAN ET AL.  |
|                              | Examiner        | Art Unit     |
|                              | Charles E Anya  | 2126         |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3/MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 26 November 2003.

2a) This action is FINAL.                    2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-3,5,7,9-11,13-16,19-21 and 23-35 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 1-3,5,7,9-11,13-16,19-21 and 23-35 is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All    b) Some \* c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) Notice of References Cited (PTO-892)

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.

4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.

5) Notice of Informal Patent Application (PTO-152)

6) Other: \_\_\_\_\_.

**DETAILED ACTION**

1. Claims 1-3,5,7,9-11,13-16,19-21 and 23-35 are pending in this application.

***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 23-25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

4. Claim 23 recites the limitation "a parallel database system" and "starting database software components" in lines 2 and 3 respectively. There is insufficient antecedent basis for this limitation in the claim.

For the purpose of this office action the examiner would assume that the phrases "a parallel database system" and "starting database software components" mean "a parallel system" and "starting software components" respectively.

5. Claim 24 recites the limitation "the database software components" and "process database queries" in lines 1 and 2 respectively. There is insufficient antecedent basis for this limitation in the claim.

For the purpose of this office action the examiner would assume that the phrases "the database software components" and "process database queries" mean "the software components" and "process queries" respectively.

6. Claim 24 recites the limitation "the database software components" in line 1.

There is insufficient antecedent basis for this limitation in the claim.

For the purpose of this office action the examiner would assume that the phrase "the database software components" means "the software components".

#### ***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. **Claims 1-3,5,7,9-11 and 23-27 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Pat. No. U.S. Pub. No. 2002/0112150 A1 to Lawing et al.**

9. As to claim 1, Lawing teaches a method of controlling software components in a processing system having plural nodes (figure 1 page 2 paragraph 0021), comprising:

receiving a request to start the processing system (Login Screen 32 page 3 paragraph 0024), launching a start routine in a first one of the nodes in response to the request (Login Routine 20 page 3 paragraph 0024), the start routine causing a service to be invoked in each of the nodes (Startup Routine 22 page 3 paragraph 0024), determining one or more selected software components to start in each node (figure 3 page 3 0025 – 0027) and the services starting the selected software components in the respective nodes of the processing system (figure 3 page 3 paragraph 0025, figure 4 page paragraph 0030).

10. As to claim 2, Lawing teaches the method of claim 1, wherein causing the services to be invoked comprises causing WINDOWS services to be invoked ((figure 3 page 3 paragraph 0025/0026, figure 4 page 3 paragraph 0030 – 0032).

11. As to claim 3, Lawing teaches the method of claim 2, further comprising invoking the services with a WINDOWS service control manager module (figure 4 page 3 paragraph 0030).

12. As to claim 5, Lawing the method of claim 1, wherein starting the selected software components comprises starting software components defined as WINDOWS services (“...launch manager values...” page 3 paragraph 0030 – 0032).

13. As to claim 7, Lawing teaches the method of claim 1, further comprising running an instance of a manager module in each node, the instance of the manger module in each node responsive to the start routine to invoke the services (figure 4 page 3 paragraph 0030).

14. As to claim 9, Lawing teaches the method of claim 1, wherein the first one of the nodes is a master node, wherein launching the start routine is performed in the master node (Network Host 12 page 2 paragraph 0022).

15. As to claim 10, Lawing teaches the method of claim 7, further comprising the start routine communicating requests to manager module instances in the nodes to start corresponding services (“...login...” page 2 paragraph 0020).

16. As to claim 11, Lawing teaches the method of claim 1, wherein invoking causing the services to be invoked comprises causing one service to be invoked for each software component (Step 38 page 3 paragraph 0024).

17. As to claim 23, Lawing teaches the method of claim 1, wherein starting, the selected software components comprises starting software components (figure 4 page 3 paragraph 0030).

Although Lawing is does not explicitly teach the processing system comprising a parallel system, but by teaching Windows operating system parallel system is inherently obtainable.

18. As to claim 24, Lawing teaches the method of claim 23, wherein starting the software components comprises starting a query coordinator in each node to process queries (figure 4 page 3 paragraph 0030).

19. As to claim 25, Lawing teaches the method of claim 24, wherein starting the software components comprises starting a data server in each node to control access of data in storage (Pulse Tool 222 page 5 paragraph 0046, Control Tool 226 page 6 paragraph 0049).

20. As to claim 26, Lawing teaches the method of claim 1, further comprising each service monitoring a status of a corresponding software component (figure 4 page 3 paragraph 0030) and to enable a monitoring Module to monitor statuses of the database software components in the nodes (page 4 paragraph 0035).

21. As to claim 27, Lawing teaches the method of claim 1, further comprising each service monitoring for termination of a corresponding software component (...urgent...” page 4 paragraph 0038).

***Claim Rejections - 35 USC § 103***

22. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

23. **Claims 13-16,19-21 and 28-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. No. 5,948,101 to David et al in view of U.S. Pub. No. 2002/01121150 A1. to Lawing et al.**

24. As to claim 13, David teaches a database system comprising: a plurality of nodes (figure 3 Col. 4 Ln. 5 – 31, software components executable in corresponding nodes, the software components comprising a query coordinator in each node to process database queries (OMCLBSVR 31 Col. 4 Ln. 61 – 67, Col. 5 Ln. 1 – 54).

David is silent with reference to a manager module executable in the database system to invoke services to control starting the software components and a start procedure executable in a first one of the nodes to invoke the services in respective nodes through the manager module.

Lawing teaches a manager module executable in the database system to invoke services to control starting the software components (figure 4 page 3 paragraph 0030)

and a start procedure executable in a first one of the nodes to invoke the services in respective nodes through the manager module (figure 4 page 3 paragraph 0030). It would have been obvious to apply the teaching of Lawing to the system of David. One would have been motivated to make such a modification to allow for launch manager values (page 3 paragraph 0030 – 0032).

25. As to claim 14, David is silent with reference to the database system of claim 13, wherein the manager module comprises plural instances executable on corresponding nodes.

Lawing teaches the database system of claim 13, wherein the manager module comprises plural instances executable on corresponding nodes (figure 1 page 2 paragraph 0023). It would have been obvious to apply the teaching of Lawing to the system of David. One would have been motivated to make such a modification to allow for launch manager values (page 3 paragraph 0030 – 0032).

26. As to claim 15, David is silent with reference to the database system of claim 13, wherein the manager module comprises a WINDOWS service control manager. Lawing teaches the database system of claim 13, wherein the manager module comprises a WINDOWS service control manager (figure 4 page 3 paragraph 0030). It would have been obvious to apply the teaching of Lawing to the system of David. One would have been motivated to make such a modification to allow for launch manager values (page 3 paragraph 0030 – 0032).

27. As to claim 16, David is silent with reference to the database system of claim 13, wherein the services comprise WINDOWS services.

Lawing teaches the database system of claim 13, wherein the services comprise WINDOWS services (“...launch manger values...” page 3 paragraph 0030 - 0032). It would have been obvious to apply the teaching of Lawing to the system of David. One would have been motivated to make such a modification to allow for launch manager values (page 3 paragraph 0030 – 0032).

28. As to claim 19, David is silent with reference to the database system of claim 13, wherein the start procedure comprises a start service and a program invokable by the start service.

Lawing teaches the database system of claim 13, wherein the start procedure comprises a start service and a program invokable by the start service (Step 38 page 3 paragraph 0024, “...DESKMAN...” page 3 paragraph 0032). It would have been obvious to apply the teaching of Lawing to the system of David. One would have been motivated to make such a modification to make network client available for use (page 3 paragraph 0024).

29. As to claim 20, David teaches a database system comprising: a plurality of nodes (figure 3 Col. 4 Ln. 5 – 32), database software components executable in corresponding nodes (OMCLBSVR 31 Col. 4 Ln. 61 – 67, Col. 5 Ln. 1 – 54).

David is silent with reference to a manager module executable to control the database software components in the plural nodes and to enable a monitoring Module to monitor statuses of the database software components in the nodes.

Lawing teaches a manager module executable to control the database software components in the plural nodes (figure 4 page 3 paragraph 0030) and to enable a monitoring Module to monitor statuses of the database software components in the nodes (page 4 paragraph 0035). It would have been obvious to apply the teaching of Lawing to the system of David. One would have been motivated to make such modification to obtain a desired configuration (page 4 paragraph 0035).

30. As to claim 21, David teaches an article comprising one or more machine readable storage media containing instructions that when executed cause a database system having plural nodes to (figure 3 Col. 4 Ln. 5 – 32): receive a command to start database software components in the plural nodes (figure 4 – 6 Col. 4 Ln. 32 – 67), and launch a start routine in a first one of the nodes in response to the command (Step 125 Col. 4 Ln. 47 – 67)

David is silent with reference to issuing requests, from the start routine, to respective nodes; an in response to the requests, invoke services in respective nodes to start to database software components.

Lawing teaches to issuing requests, from the start routine, to respective nodes; an in response to the requests, invoke services in respective nodes to start to database software components (Step 120-136 page 3 paragraph 0030). It would have been

obvious to apply the teaching of Lawing to the system of David. One would have been motivated to make such modification in order to determine the type of Windows operating system (page 3 paragraph 0030).

31. As to claim 28, David is silent with reference to the database system of claim 13, further comprising a storage, wherein the software components further comprise a data server in each node to control access to data in the storage.

Lawing teaches the database system of claim 13, further comprising storage, wherein the software components further comprise a data server in each node to control access to data in the storage (Control Tool 226 page 6 paragraph 0049). It would have been obvious to apply the teaching of Lawing to the system of David. One would have been motivated to make such a modification so that new configurations could be tested (page 3 paragraph 0049).

32. As to claim 29, David is silent with reference to the database system of claim 13, wherein each service is adapted to monitor for termination of a corresponding query coordinator.

Lawing teaches the database system of claim 13, wherein each service is adapted to monitor for termination of a corresponding query coordinator (Text 224 page 5 paragraph 0048). It would have been obvious to apply the teaching of Lawing to the system of David. One would have been motivated to make such a modification in order

to stop the configuration routine from installing a particular program (page 5 paragraph 0048).

33. As to claim 30, David is silent with reference to the database system of claim 13, wherein the start procedure is adapted to be invoked in response to a request to start a database application.

Lawing teaches the database system of claim 13, wherein the start procedure is adapted to be invoked in response to a request to start a database application (figure 4 0030). It would have been obvious to apply the teaching of Lawing to the system of David. One would have been motivated to make such a modification to allow for launch manager values (page 3 paragraph 0030 – 0032).

34. As to claim 31, David is silent with reference to the article of claim 21, wherein starting the database software components comprise starting a query coordinator to process database queries and a data server to control access of data in storage in each node.

Lawing teaches the article of claim 21, wherein starting the database software components comprise starting a query coordinator to process database queries and a data server to control access of data in storage in each node (Control Tool 226 page 6 paragraph 0049). It would have been obvious to apply the teaching of Lawing to the system of David. One would have been motivated to make such a modification so that new configurations could be tested (page 3 paragraph 0049).

35. As to claim 32, Daivd is silent with reference to the article of claim 21, wherein the instructions when executed cause the database system to cause each service to monitor for termination of a corresponding database software component.

Lawing teaches the article of claim 21, wherein the instructions when executed cause the database system to cause each service to monitor for termination of a corresponding database software component ("...urgent..." page 4 paragraph 0038). It would have been obvious to apply the teaching of Lawing to the system of David. One would have been motivated to make such a modification in order to inform a user of unplanned outages (page 4 paragraph 0038).

36. As to claim 33, David teaches a database system comprising: a plurality of nodes (figure 3 Col. 5 – 32), database software components executable in corresponding nodes (OMCLBSVR 31 Col. 4 Ln. 61 – 67).

David is silent with reference to a start procedure executable in a first one of the nodes to invoke services nodes in respective nodes and wherein the services are executable to start the database software components.

Lawing teaches a start procedure executable in a first one of the nodes to invoke the services in respective nodes and the services are executable to start the database software components figure 4 page 3 paragraph 0030). It would have been obvious to apply the teaching of Lawing to the system of David. One would have been motivated to

make such a modification to allow for launch manager values (page 3 paragraph 0030 – 0032).

37. As to claim 34, David teaches the database system of claim 33, further comprising a storage, wherein the database software components comprise a query coordinator in each node to process database queries, and a data server in each node to control access of the storage (OMCLBSVR 31 Col. 4 Ln. 32 – 67).

38. As to claim 35, David teaches the database system of claim 34, wherein one service is invoked in each node for each database software component in the node (“...Letterbugs...” Col. 4 Ln. 16 – 21).

### ***Conclusion***

39. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Pat. No. 6,421,77 B1 to Pierre-Louis et al.

40. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles E Anya whose telephone number is (703) 305-3411. The examiner can normally be reached on M-F (8:30-6:00) First Friday off.

The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Charles E Anya  
Examiner  
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